

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

TRIDINETWORKS, LTD., Plaintiff, v. NXP-USA, INC. and NXP B.V., Defendants.	C.A. No. 19-1062-CFC-CJB
TRIDINETWORKS, LTD., Plaintiff, v. SIGNIFY NORTH AMERICA CORPORATION and SIGNIFY NETHERLANDS B.V., Defendants.	C.A. No. 19-1063-CFC-CJB
TRIDINETWORKS, LTD., Plaintiff, v. STMICROELECTRONICS, INC., STMICROELECTRONICS INTERNATIONAL N.V., and DOE-1 d/b/a “STMICROELECTRONICS”, Defendants.	C.A. No. 19-1064-CFC-CJB

**PLAINTIFF’S ANSWERING BRIEF IN OPPOSITION
TO MOTION FOR SUMMARY JUDGMENT**

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I. INTRODUCTION

Defendants attack Plaintiff's '276 patent as if it were a patent seeking exclusive rights to the set of motions customarily involved in setting up a computer network.

The attack is misdirected. The patent does automate the end result, but not by merely attempting to automate the steps of a preexisting, manual process. Rather, the patent's disclosure and claims *change* the procedural steps of the process, to allow for full automation, and the patent further adds a specific, physical item (a "configuration adapter") into the devices to be networked, to make the revised procedure possible. These transformative characteristics of the invention take it far beyond the prohibition on patenting abstract ideas under § 101.

Defendants repeatedly fall back to what are at best obviousness arguments, but novelty and nonobviousness are not relevant to determining the presence of patent eligible subject matter under § 101.

In addition, Defendants' approach, in seeking to equate the "configuration adapter" of the patent claims to various electronic components previously used for other purposes, repeatedly overlooks a material component integrated in the adapter (not only wireless storage of data on an unpowered device but also reading the data through a wired "device contact interface"). Defendants further presume that because such a device could be built from an assortment of electronic parts, that the

device assembly can thereby be considered conventional component itself. These omissions and unwarranted inferences undercut Defendants' arguments.

The list of undisputed facts proffered by Defendants is disputed on material points.¹ Even as stated, the facts presented by Defendants are insufficient to support summary judgment in Defendants' favor. The motion must be denied.

II. THE '276 PATENT

A. Problem and Solution

The '276 patent concerns technology arising in connection with "remotely controlling and monitoring devices in many areas such as home and commercial automation, industrial automation, lighting, and heating, ventilation and air conditioning (HVAC) control" (Ex. 1 to Abramson Decl, "'276 patent," 1:35-38), a field that was the origin of what today is referred to as the "Internet of Things" (IoT). The patent concerns a new and different process and set of electronic components to automate setting up a networked control application.

The '276 patent is not by any stretch a *software* patent, as Defendants attempt to make it appear. It is not about an advance achieved by how a general purpose computer is programmed, or about gathering, manipulating, or displaying

¹ Plaintiff submits herewith its Statement of Disputed Facts ("Statement") and the Declaration of Ronald Abramson ("Abramson Dec.").

information. Rather, the '276 patent concerns changing the content and sequence of the steps involved in setting up a network, in a manner that vastly streamlines the procedure, incorporating physical components not previously used for that purpose, in order to make the revised procedure possible.

The '276 patent summarizes the state of the art at the time of filing of its parent provisional application, in which forming networks of distributed automation devices required steps such as the following:

1. Entering a unique ID (UID) such as a unique radio ID [for each device].
2. Entering a startup attribute set (SAS) such as a personal area network (PAN) ID of the network.
3. Identifying (connecting) the physical location of the device with its UID and its logical location and function on the network scheme.
4. Pairing/binding of controlling devices and sensors.

'276 patent, 1:58-64. The '276 patent notes that the “installation, [and] configuration of parameters for binding of the wireless devices requires highly skilled professionals, special equipment and complicated manual procedures.” *Id.*, 1:42-45. It also raises the issue of scalability, noting that “[t]his installation challenge is increased when a large quantity of sensing devices needs to be paired to corresponding controlling devices.” *Id.*, 1:65-67.

The '276 patent addresses the “need for a simple automated method and system for initialization, location and binding of devices in large wireless networks.” *Id.*, 3:4-6.

To solve the stated problem, the '276 patent brings in technology from a different field, the field of RFID, to significantly reduce the work and level of worker expertise required to set up networks of distributed devices. *See id.*, 4:25-28, 10:5-6, 13:35-37, 13:65-14:1, 14:38-40, 14:58-60. The approach is described at length in the specification and summarized in Table 1 in columns 10-11 and in flowcharts in Figs. 9-17 of the patent. The approach disclosed therein involves creating a design for the network in advance, and then, using advanced features of RFID—which includes not only the ability to provide contactless communication typical of all RFID, but also the further capability of being able to store information in a memory without applied power, as made possible by certain NFC varieties of RFID—it proceeds by contactlessly transferring the design data of the design to each device via RFID. *See, e.g., id.*, 11:50-60, 14:58-65. When powered on in their installed positions, the devices (internally) use the data that was previously stored in them via RFID to then form and come up on the network and assume their respective roles in the network, per the design.

Thus, in place of the previously manual procedure for installing such a network, the patent teaches a simplified procedure:

- **Authoring a pre-specified design.** Create a complete electronically represented design first. *See id.*, 24:16-26. The design, which can be created separately on a workstation, will cover for everything that is going to be in the network. The design will include, up front, all of the parameters, data, and “binding” information that will be needed to define device interconnections

over the network in order to run an automation application (*e.g.*, actuation, sensory, control, or other automation application). *See id.*, 24:30-40.

- **Download.** Transfer the design electronically to a handheld “commissioning tool.” *See id.*, 11:50-52, 12:14-17. This may be a simple download from the design system to the commissioning tool. The commissioning tool is fitted with a “configuration adapter” that can further transfer data from the design, via, *e.g.*, NFC contactless communications. *See id.*, 13:1-6, 14:49-57.
- **Use specially outfitted devices.** Each device to be included in the network application (sensor, switch, controller, etc.) is outfitted in advance with a “complementary” configuration adapter. *See id.*, 12:44-49. This configuration adapter is “complementary,” in the sense that it can receive and store data from another configuration adapter (such as the configuration adapter in the commissioning tool), via the same protocol for both adapters (*e.g.*, NFC).
- **“Tap.”** Use the commissioning tool to transfer the relevant data from the design to each respective device. *See, e.g., id.*, 13:1-6. This is done between the two configuration adapters: the one on the commissioning tool and the one embedded in the device. The operation can be, for example an NFC “tap” of the commissioning tool to the device. *See, e.g., id.*, 22:11-18. *The device can be configured in this step without needing to be powered on. See, e.g., id.*, 14:62-65, 22:6-8.
- **Install.** Physically install each device in its respective location where needed. *See id.*, 11:56-60, 21:63-65.
- **Turn the devices on.** Initialize (*e.g.*, turn on, reset, or power up) the device(s). Each device will automatically read its own stored configuration data, and establish its own connections to the network, including all needed communications “bindings” to other network devices as needed to create the desired network application. *See id.*, 23:7-17.

Note that the above steps are procedurally different from the prior manual setup process. Under the new procedure, device initialization is *deferred*, allowing device configuration to take place *beforehand*, without powering the devices, which is especially significant where devices would otherwise have to be accessed from ladders, crawl spaces, etc. Everything can be loaded before installing the devices on

location; even while the devices are still packed in their shipping boxes. (By contrast, everything from at least the second step in the prior process requires that the device be running.) Configuration itself also takes place in one operation (the “Tap” step), meaning that the installer works from a completely “canned” design, and need not have the technical knowledge to enter individual device settings. (For convenience, the installer may also defer the “Tap” until after physically installing the device in its intended location. *See id.*, 22:49-50).

The new procedure does require specially outfitted devices, because the process presumes that each device has a built-in “dedicated” configuration adapter. *Id.*, 4:23-29. However, this is merely a procurement issue (one, by the way, that the Defendants are more than happy to address by supplying the items used to infringe), not an operational issue for the installer, who will take the devices as provided and need only “Tap” on each device and install them physically in place.

The solution does not end with simply using NFC to configure an *individual device* to incorporate that device into a network. The disclosure contemplates that the created design that is downloaded to a commissioning tool can incorporate *a plurality of devices* having a variety of roles in the network, for example including devices such as lights, switches, and sensors, as well as more complex devices such as access points and master controllers. *See, e.g., id.*, Fig. 1; Table 2 at cols. 15-16; 4:46-47, and 16:27-65. The created design in these cases, as in the others, comprises

parameters, configuration information, and binding information for the devices to be included in the network.

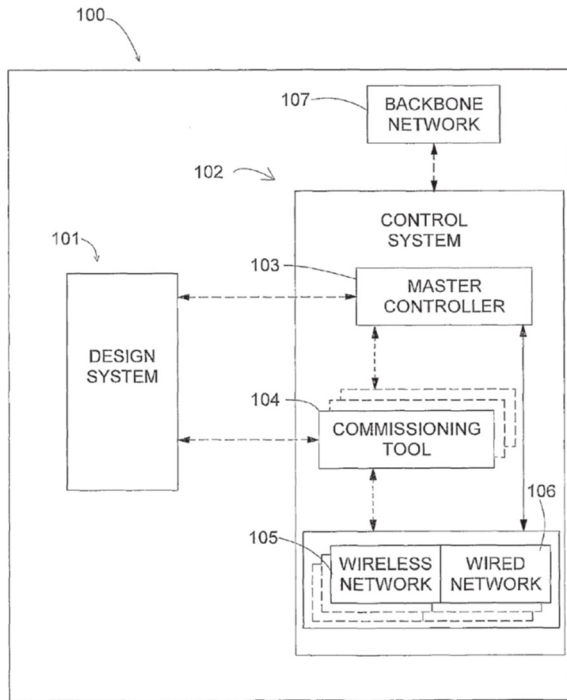


Fig. 1

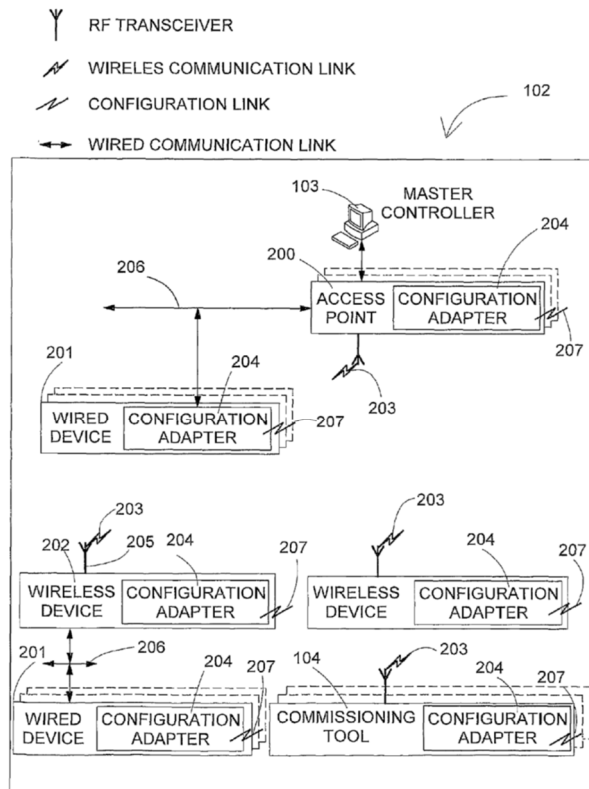


Fig. 2

Looking at the claimed processes and apparatus in further detail, and with reference to Figures 1, 2, and 7 reproduced here, a network design comprising the devices to be networked is created (in design system 101), and the design is accessed by a commissioning tool 104 (which may, *e.g.*, be built into a PDA). *See id.*, 13:1-6.

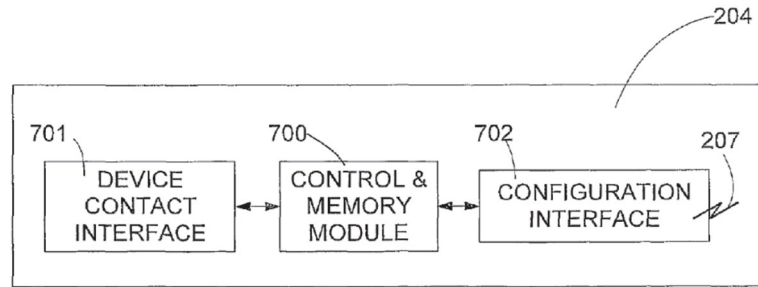


Fig. 7

The patent describes Fig. 2, shown above, as “a schematic block diagram of a configuration adapter 204, *according to the present invention.*” *Id.*, 14:47-48 (emphasis added). Each wired or wireless device (201, 202) has an embedded configuration adapter (204), having the capability, without applied power, to receive and store the design data on the device (for example, through a “tap” from an NFC-based commissioning tool)—such that the device containing the configuration adapter may be installed in the desired physical location and later be initialized (*e.g.*, by being powered on or reset), at which point it can simply bootstrap itself into (*i.e.*, form) the designed network. *See, e.g., id.*, Fig. 14; 22:57-23:17. As a result, the personnel performing the installation no longer need to physically bring up each device separately on the network and perform technical configuration steps on each device through a communications console (as described, for example at *id.*, 1:39-67), allowing numerous devices to be deployed and networked in a simple manner, by unskilled personnel, which was not possible in the prior art.

As shown in Fig. 7, a configuration adapter in accordance with the invention includes three subcomponents: (1) a “configuration interface 702 ... to load the configuration data downloaded from the commissioning tool (104) ... through the configuration link 207,” which “may be carried out by contactless technologies (such as RFID/NFC)”; (2) “control and memory module 700 ... to store the loaded configuration data and to control the adapter”; and (3) “[t]he device contact interface 701[, which] may be a standard communication interface (such as SPI or 1-Wire) or a standard control interface (such as DALI).” *Id.*, 14:49-52, 14:58-59, 14:60-61, 14:67-15:2. The disclosure also refers to I²C as a “standard sensor interface.” *Id.*, 14:8.

Design system 101 (Fig. 1) may be used to create the design for a wired and wireless network control system 102. *Id.*, 12:10-14. The resultant design data may be downloaded into a master controller 103 of control system 102 and is used to control wireless networks 105 (which include wireless devices 202) and wired networks 106 (which include wired devices 201). *Id.* This design data may also be downloaded into a commissioning tool 104 that is used to commission devices in the wireless 106 and wired 105 networks. *Id.*, 12:14-17.

Design system 101 (Fig. 1) is used to define a network scheme and binding information of system 102, with each wireless 202 and wired 201 device having a (wired or wireless) logical ID that specifies its type and a physical location that can

be later used for installation and commissioning purposes. *Id.*, 15:5-10, 15:41-47. Additionally, wired and wireless device mappings are created, which can include mappings between logical IDs and wired 206 and wireless 205 communication link addresses, and startup attribute sets (SAS) for wireless devices (*e.g.*, personal area network IDs, channel masks, network keys, radio IDs). *Id.*, 17:20-19:2.

Collectively, this information defines the wired 106 and wireless 105 networks that will be created when the wired 201 and wireless 202 components initialize themselves. Each wired device 201, wireless device 202, and access point 200 includes a respective configuration adapter 204, shown in Fig. 7. *Id.*, 14:47-57. The configuration adapters 204 are used to obtain commissioning information from commissioning tool 104. *Id.* A configuration interface 702 is used to load and download configuration data, which can be via contactless technologies (such as RFID/NFC). *Id.*, 14:58-65. The configuration adapters 204 in the wireless devices 202, wired devices 201, and access point 200 do not need to be powered-up during the downloading of configuration data. *Id.*

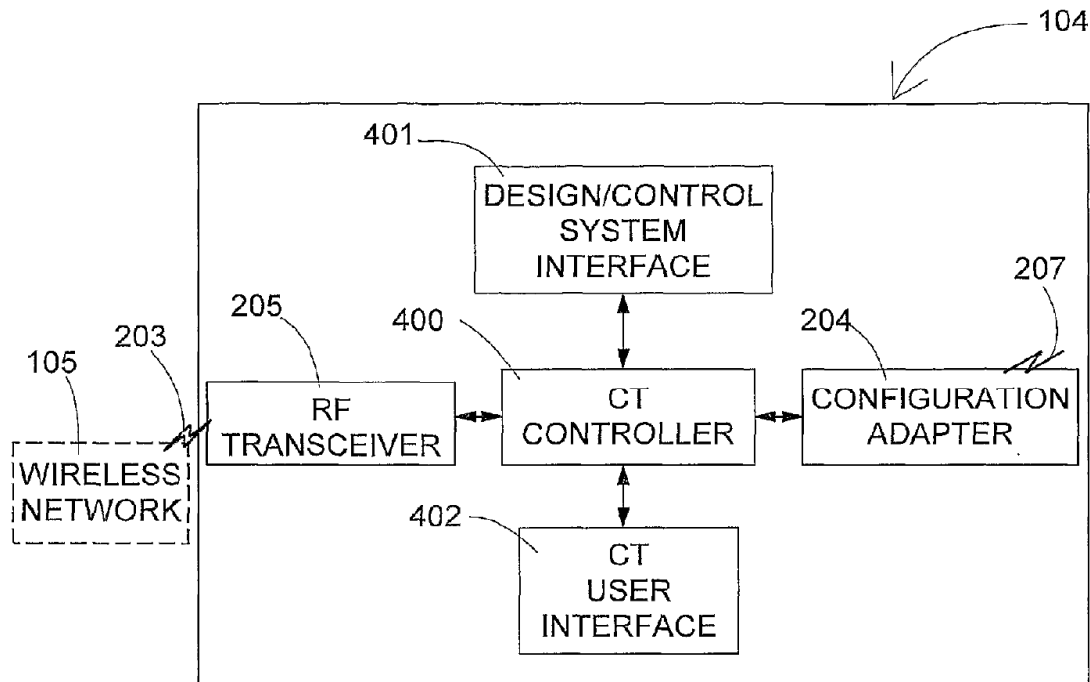


Fig. 4

Commissioning tool 104, shown in Fig. 4, also contains a configuration adapter 204 that can communicate with the other configuration adapters 204. *Id.*, 13:22-37. Commissioning tool 104 holds the design data created in design system 101 and downloads appropriate configuration data through configuration link 207 into the wireless devices 202, the wired devices 201, and access point 200. *See id.*, 21:57-22:53.

Wireless devices 202 are installed according to their respective types and locations as taken from the network schemes indicated by commissioning tool 104. *Id.* The commissioning tool 104 is then brought into proximity with the configuration adapter 204 of the installed wireless device, and commissioning information is then transferred into the configuration adapter 204 of the wireless device 202, with no

power-up the wireless device 202 needed. *Id.* The independent claims at issue here both incorporate the corresponding recitation that “of the configuration adapters included in the system, only said configuration adapter of said commissioning tool must be powered-up during data communication between said at least one commissioning tool and said devices.”

When devices 201, 202 are powered-up they initialize themselves based upon the commissioning information present within their respective configuration adapters 204. *Id.*, 22:54-23:39. They use this information, such as radio IDs and SAS information, to create and join the designated networks and to locate and communicate with other devices. *Id.* Device bindings are then created to complete formation of the control system 102 per the network design. *Id.*, 23:40-67. Master controller 103 can then control the system 102 via access point 200. *Id.*, 12:58-64.

B. Background on RFID

The claims of the '276 patent all recite an operation of storing data on an unpowered device. The specification discloses “contactless technologies (such as RFID/NFC)” as way to effectuate this storage. '276 patent, 4:26-27. Yet, there were different types of RFID, most of which are not relevant to this case. *See* Ex. 2 to Abramson Dec., Declaration of Anthony G. Rowe, dated December 4, 2020 (“Rowe Dec.”) at Ex. C (“Rowe PTAB Dec.”) ¶ 13.

One differentiator of RFID tags is whether the tag is “active” or “passive.” An active tag has an on-board power supply, such as a battery, so that, for example, it can initiate communications on its own. A passive tag, by contrast, only responds when probed by an RF signal from outside itself and is powered by the RF signal received through its antenna. *Id.* ¶ 14.

Another characteristic of an RFID tag is the type of antenna it uses. The principal choices are inductive (or “Near Field”) antennas, or “backscatter” (“Far Field”) antennas. Inductive antennas operate like transformer windings, and can transfer much more power to the tag, which is useful for operating electronics on the tag. But inductive antennas have very short range (typically, 4 cm. or 1¼ inches). Backscatter antennas can have longer range, though for a passive tag the range is still limited, typically on the order of 1 meter. However, backscatter antennas are much more limited in terms of the amount of power they can supply for electronics in a passive tag. *Id.* ¶ 15.

Generic RFID at the time of the ’276 patent’s priority date can be seen in the typical anti-theft tag in a department store. These were passive devices, typically with backscatter antennas. The simplest tags, EAS (“Electronic Article Surveillance”) tags, were just binary devices that reflected an RF signal when active and could be “deactivated” at the checkout counter (so as not to return the signal when deactivated). More sophisticated tags also reported sending back an ID in the RF

back-signal, which could be correlated with what the tagged item was. In either implementation, an RFID “tag” is affixed to inventory items. Such a tag derives its own power from the probe RF signal sent to it by the “reader” (*e.g.*, a device at the store exit), over short range (typically, one meter or less). In the case of the type of tag that reports an ID, that power can also drive a simple transponder circuit, which modulates an RF signal to be returned through the device’s antenna with a digital ID read from a static memory on the tag. Thus, the RF signal returned to the reader is encoded with an ID from the tag. *Id.* ¶ 16. Another characteristic of NFC is that, unlike a network, it operates peer-to-peer. *Id.* ¶ 37.

Turning to the present case, the functionality of the “configuration adapter” of the ’276 patent goes well beyond the simple inventory control RFID tag application described above. *Id.* ¶ 17. In the case of the configuration adapter of the ’276 patent, the device also needs to be able receive, demodulate, and store on a non-volatile storage device, a significant amount of data (*e.g.*, binding information, credentials, and Startup Attribute Set (*see, e.g.*, ’276 patent, 18:31-50)). These functional requirements effectively limit the configuration adapter to types of RFID that can transfer sufficient power for these operations, in addition to communicating the RF modulated data itself. Rowe PTAB Dec. ¶ 17.

Thus, the type of tag that would be used in an RFID implementation of the ’276 patent would be a passive tag with an inductive antenna, as in ISO 14443, a

standard cited in the '276 specification. '276 patent, 14:57; *id.* ¶ 18. ISO 14443 is a standard for NFC communications. Rowe Dec. ¶ 18. Moreover, the tag would also have to have non-volatile storage on board, which is wirelessly writable without powering up the device in which it is contained. Furthermore, to be useful in actually bringing up the network, the configuration adapter further incorporates a wired “device contact interface” for accessing the storage, such as a connection for an interface bus (*id.*), which ISO 14443 did not provide for.

In sum, while the '276 patent and some of the references cited by Defendants refer to “RFID,” it is important to bear in mind that the type of RFID that is operable in these cases is in the nature of NFC, and furthermore, beyond simply being an NFC tag, the functionality required by the '276 patent further requires that the device integrate non-volatile storage that is writable without powering up the device that contains the storage element and the device contact interface, to enable a powered device to later use the stored information. *Id.* ¶¶ 19-20. Thus, the notion of RFID itself does not solve the problem.

III. LEGAL STANDARDS

A. Summary Judgment Standards

Pursuant to Rule 56(a), “[t]he court shall grant summary judgment if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” The moving party bears the burden of

demonstrating the absence of a genuine issue of material fact. *See Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 585-86 (1986). An assertion that a fact cannot be, or, alternatively, is, genuinely disputed must be supported either by citing to “particular parts of materials in the record, including depositions, documents, electronically stored information, affidavits or declarations, stipulations (including those made for purposes of the motion only), admissions, interrogatory answers, or other materials,” or by “showing that the materials cited do not establish the absence or presence of a genuine dispute, or that an adverse party cannot produce admissible evidence to support the fact.” Fed. R. Civ. P. 56(c)(1)(A)-(B). If the moving party has carried its burden, the nonmovant must then “come forward with specific facts showing that there is a genuine issue for trial.” *Matsushita*, 475 U.S. at 587 (internal quotation marks and emphasis omitted). The Court will “draw all reasonable inferences in favor of the nonmoving party, and it may not make credibility determinations or weigh the evidence.” *Reeves v. Sanderson Plumbing Prods., Inc.*, 530 U.S. 133, 150 (2000). Summary judgment cannot be granted if there is “evidence on which the jury could reasonably find” for the nonmoving party. *See Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 252 (1986).

B. Section 101 Standards

Alice and the Supreme Court’s precursor decision, *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66 (2012), prescribe a two-part analysis for patent eligible subject matter under § 101:

1. “whether the claims at issue are directed to a patent-ineligible concept”
2. if yes (and only if yes), “we consider the elements of each claim both individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.”

Alice Corp. v. CLS Bank Int’l, 573 U.S. 208, 217-18 (2014) (citing *Mayo*, 566 U.S. at 77-79).

1. *Alice* Step 1

There are a number of subordinate rules that apply to the analysis under Step 1 of *Alice*.

a) Determining what the patent claim is “directed to”

What “directed to” means in the context of *Alice* and *Mayo* is obviously key, in that this determination drives the remainder of the analysis. There are controlling legal standards for this. For example, the Federal Circuit recently stated the following:

The Step 1 “directed to” analysis called for by our cases depends on an accurate characterization of *what the claims require and of what the patent asserts to be the claimed advance*. The accuracy of those characterizations

is crucial to the sound conduct of the inquiries into the problem being addressed and whether the line of specificity of solution has been crossed.

TecSec, Inc. v. Adobe Inc., 978 F.3d 1278, 1294 (Fed. Cir. 2020) (emphasis added).

b) Step 1 must consider the claim as a whole

The claims must be considered “in their entirety to ascertain whether their character as a whole is directed to excluded subject matter.” *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1312 (Fed. Cir. 2016) (internal quotations and citation omitted); *see also Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) (“[W]e have described the first-stage inquiry as looking at the ‘focus’ of the claims, their ‘character as a whole’”) (citations omitted); *Alice*, 573 U.S. at 218 n.3 (applying “the general rule that patent claims must be considered as a whole”) (internal quotations and citations omitted).

c) Whether individual claim elements are implemented in a conventional manner is irrelevant to Step 1

“The analysis under *Alice* step one is whether the claims as a whole are ‘directed to’ an abstract idea, *regardless* of whether the prior art demonstrates that the idea or other aspects of the claim are *known, unknown, conventional, unconventional, routine, or not routine.*” *CardioNet, LLC v. InfoBionic, Inc.*, 955 F.3d 1358, 1372 (Fed. Cir. 2020) (emphasis added) (citing, *inter alia*, *Diamond v. Diehr*, 450 U.S. 175, 188-89 (1981)). As the Supreme Court stated in *Diehr*, “[t]he ‘novelty’ of any element or steps in a process, or even of the process itself, is of no relevance in

determining whether the subject matter of a claim falls within the § 101 categories of possibly patentable subject matter.” 450 U.S. at 188–89 (footnote omitted).

d) Novelty and nonobviousness plays no part in the Step 1 analysis

“The § 101 patent-eligibility inquiry is only a threshold test.” *Bilski v. Kappos*, 561 U.S. 593, 602 (2010). Comparisons of the prior art and the claims are “reserve[d] for §§ 102 and 103 purposes.” *CardioNet*, 955 F.3d at 1373.

2. *Alice* Step 2

Step 2 of the *Alice* analysis concerns examining the elements of the claim to determine whether it contains an “inventive concept” sufficient to “transform” the claimed abstract idea into a patent-eligible application.

a) Step 2 is reached if (and only if) the claim does not pass Step 1

If the claims are not directed to an abstract idea under Step 1, there is no need to proceed to Step 2. *See Alice*, 573 U.S. at 217; *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1339 (Fed. Cir. 2016); *Thales Visionix Inc. v. United States*, 850 F.3d 1343, 1349 (Fed. Cir. 2017).

b) For Step 2, the claim elements are considered individually in the search for an inventive concept

The inventive concept of Step 2 “may arise in one or more of the individual claim limitations.” *BASCOM Global Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1349 (Fed. Cir. 2016) (citing *Alice*, 573 U.S. at 217).

c) An inventive concept for Step 2 can also be found in a particular combination of elements

In seeking an inventive concept in *Alice* Step 2, the court must “consider the elements of each claim both individually and ‘as an ordered combination.’” *Alice*, 573 U.S. at 217; *see, e.g., BASCOM*, 827 F.3d at 1350 (“As is the case here, an inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces”).

d) Meaning of “Transform” in Step 2

To transform an abstract idea into a patent-eligible application, the claims must do “more than simply stat[e] the abstract idea while adding the words ‘apply it.’ ” *Alice*, 573 U.S. at 221 (quoting *Mayo*, 566 U.S. at 72) (internal alterations omitted); *see also SRI Int’l, Inc. v. Cisco Sys., Inc.*, 930 F.3d 1295, 1303 (Fed. Cir. 2019).

e) To Merely “Do It With a Computer” Is Not Inventive

Claims that merely recite an abstract idea “along with the requirement to perform it on the Internet, or to perform it on a set of generic computer components ... would not contain an inventive concept.” *BASCOM*, 827 F.3d at 1350; *see also CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1370 (Fed. Cir. 2011) (finding the addition of the use of the Internet to verify a credit card transaction did not meaningfully add to the abstract idea of verifying the transaction).

f) An inventive concept for Step 2 cannot be based on the abstract idea that triggered Step 1

A further requirement is that, to satisfy step 2, courts must look to “claim limitations other than the invention’s use of the ineligible concept.” *BSG Tech LLC v. BuySeasons, Inc.*, 899 F.3d 1281, 1290 (Fed. Cir. 2018).

g) Whether the implementation of a claim element is routine and conventional for Step 2 may present an issue of fact

“The question of whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field is a question of fact.” *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018).

Nor does the existence of prior art establish that something is “routine and conventional.” “Whether a particular technology is well-understood, routine, and conventional goes beyond what was simply known in the prior art. The mere fact

that something is disclosed in a piece of prior art, for example, does not mean it was well-understood, routine, and conventional.” *Id.* at 1369.

3. Section 101 Standard of Proof—Clear and Convincing Evidence

The U.S. Supreme Court ruled in *Commil USA, LLC v. Cisco Systems, Inc.*, that the clear and convincing evidentiary standard applies to all challenges to a patent’s validity. 135 S. Ct. 1920, 1928-29 (2015). To support a claim of invalidity, a defendant has the burden to establish all facts pertinent to the analysis by clear and convincing evidence. *Berkheimer*, 881 F.3d at 1368. On this motion, the burden rests on Defendants because they are the party asserting invalidity. *See eCeipt LLC v. Homegoods, Inc.*, 2019 WL 10302271 at *2 (W.D. Tex. May 20, 2019); *accord TMI Sols. LLC v. Bath & Body Works Direct, Inc.*, 2018 WL 4660370 at *4 (D. Del. Sept. 28, 2018).

IV. Argument

For *Alice* Step 1, the Defendants have chosen to run with the broadest conceivable interpretation of what the claims are “directed to.” Their analysis would reduce the patent to “the concept of setting up a network, which is a longstanding practice.” D.I. 68 (“Opening Br.”) at 14. This extreme characterization simply bulldozes over what the patent itself explains is its advance over the prior art and strips all major aspects of the implementation out of the patent at *Alice* step 1.

As discussed in the introduction and will be addressed herein, the claims of the '276 patent do not merely automate a previously performed procedure, but materially change the procedure and introduce new physical elements. Defendants' formulation of what the patent is purportedly "directed to" is untethered to the language of the patent claims and written description, and further asks the wrong questions and, as a result, is untethered to the law as well. *See Enfish*, 822 F.3d at 1337.

Defendants' attempted caselaw analogies to software, business process, and information manipulation cases do not fit. There has never been any case under § 101 remotely similar to this case, which found against patent eligibility.

A. Step 1 Analysis

Alice Step 1 involves determining "whether the claims at issue are directed to a patent-ineligible concept," such as a law of nature, a natural phenomenon, or an abstract idea. 573 U.S. at 218.

Defendants cite no authority on how the Court is supposed to determine what a patent claim is "directed to." Instead, their brief simply opens with the pivotal pronouncement that "independent claim 1 is drawn to the concept of setting up a network, which is a longstanding practice." Opening Br. at 14. This formulation is repeated, over and over, throughout Defendants' brief, with no attempt to support it with any accepted legal analysis.

To serve their ends of seeking to invalidate the patent, the Defendants quite obviously chose the broadest conceivable formulation they could devise, for what they say the claims of the '276 patent are “directed to.”

Applicable authority requires considerably more rigorous analysis than what is reflected in the Defendants’ brief. At step one of the Alice framework, we “look at the focus of the claimed advance over the prior art to determine if the claim’s character as a whole is directed to excluded subject matter.” *Affinity Labs of Tex., LLC v. DirecTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016) (internal quotation marks omitted); *Koninklijke KPN N.V. v. Gemalto M2M GmbH*, 942 F.3d 1143, 1149 (Fed. Cir. 2019) (same) (quoting *Affinity Labs*).

The necessity of a starting analysis that looks to the claimed advance and not just the nature of the result was emphasized recently by the Federal Circuit:

The Step 1 “directed to” analysis called for by our cases depends on an accurate characterization of *what the claims require and of what the patent asserts to be the claimed advance*. The accuracy of those characterizations is crucial to the sound conduct of the inquiries into the problem being addressed and whether the line of specificity of solution has been crossed.

TecSec, 978 F.3d at 1294 (emphasis added). At *Alice* step one, “it is not enough to merely identify a patent-ineligible concept underlying the claim; we must determine whether that patent-ineligible concept is what the claim is ‘directed to.’” *Data Engine Tech., LLC v. Google LLC*, 906 F.3d 999, 1011 (Fed. Cir. 2018).

The *Alice* case itself teaches that “[a]t some level, all inventions ... embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” 573 U.S. at 217 (quoting *Mayo*, 566 U.S. at 71). The Federal Circuit has repeatedly warned of the need to “‘avoid oversimplifying the claims’ by looking at them generally and failing to account for the specific requirements of the claims.” *McRO*, 837 F.3d at 1313; *see also Enfish*, 822 F.3d at 1335 (the “directed to” inquiry with regard to patent claims is based on whether, when the claims are viewed in light of the patent specification, “their character as a whole is directed to excluded subject matter”).

Defendants argue that the challenged claims are directed to the alleged “abstract idea of setting up a network.” Opening Br. at 2. But that characterization of the claims is overbroad, as it “disregard[s] elements of the claims at issue that the specification makes clear are important parts of the claimed advance in the combination of elements.” *TecSec*, 978 F.3d at 1294.

The examination of both the claims and the specification is necessary because one of the key aspects of the eligible subject matter analysis is determining what it is that the applicant was seeking to patent.

It is not difficult to follow the instructions of the *TecSec* case and look at “what the claims require and ... what the patent asserts to be the claimed advance.” *Id.*

A strong indication of what the patent views as its claimed advance may be seen in its identification of shortcomings in the prior art and the patent's own statements of what shortcomings needed to be overcome. The answer to the inquiry is in plain view, in the patent.

The specification notes the "installation challenge" of the prior art. '276 patent, 1:42-67. It explains how that process was problematic in the prior art, specifically noting the shortcomings, which primarily concerned the disadvantages of having to actually bring up the devices on the network before they could be configured, and for failing to automate device identification.²

The analysis of prior art shortcomings ends with this statement: "There is a need for a simple automated method and system for initialization, location and

² The perceived shortcomings in the prior art are set forth in the '276 patent at 2:5-3:3:

Culbert: does not solve the problem of locating wireless devices and performing post installation configuration tasks, or how devices are distinguished from one another.

Wang: Device initialization according to Wang is a complex post-installation process.

Periera: process of determining which nodes should be paired cannot be automated.

Combs: requires pre-configuring the devices and bringing them close to an administrator (such as PC), requires software manipulation, is time consuming.

Kruse: Requires programming the dives by a master controller but does not mention how the devices are identified, how pairing/binding is achieved, or how device locations are determined.

binding of devices in large wireless networks.” ’276 patent, 3:4-6. Thus, the solution that the ’276 patent is directed to automates *all three* of initialization, location, and binding of devices.

The claim language also specifically requires the ability to do unpowered configuration *prior to* initialization and binding. Putting this all together as *TecSec* prescribes leads to the following:

The independent claims of the ’276 patent are directed to simplifying and automating the initialization, location and binding of devices in large networks by performing device configuration with the necessary setup parameters in advance of powering and initializing the devices.

This statement, unlike the non-particular, high-level formulation of the Defendants, actually articulates how the ’276 patent viewed its own advance over the prior art. This is what the Court is supposed to be looking at in Step 1. The Defendants for their part clearly got this wrong.³

Why is this not a mere abstract idea? One very simple answer is because the claimed invention does not merely automate the prior known steps of a process previously performed by humans—it *changes the process itself* (including underlying apparatus changes) in order to allow it to be automated. It also improves all of the

³ It is incumbent on a movant seeking judgment on the basis that the patent claims an abstract idea to properly identify the alleged abstract idea in its moving papers. Defendants failed to do so.

apparatus involved, as tools, and improves the networks of which they are a part by making large-scale deployments more practical.

1. Changed Process

Under the '276 patent invention, the specification of everything in the network design is separated from its instantiation. Everything associated with instantiation is *deferred*, altering the physical process steps and sequence. Everything required for instantiation gets set into motion in the last step, “initialization,” when the devices are powered up, and then *automatically* read all design details previously stored in its configuration adapter and *automatically* bring the network to completely life.

An invention that changes a physical process goes to the essence of what has been recognized to characterize patentable subject matter.

The *Alice* decision itself addressed this issue in its comparison of *Parker v. Flook*, 437 U.S. 584 (1978), which held the claims at issue patentable, with those of *Diamond v. Diehr*, 450 U.S. 175 (1981), which held claims that superficially could be characterized very similarly, as patentable.

Flook concerned a computerized process for setting alarm limits in a process for cracking hydrocarbons. 437 U.S. at 585-86. *Diehr* concerned a superficially similar claim, involving a computerized process for determining when to release a mold for curing synthetic rubber. 450 U.S. at 177.

Flook and *Diehr* were discussed at length and distinguished in the *Alice* decision. 573 U.S. at 222-23. The point of distinction, per *Alice*, was that the claims in *Diehr* covered patent-eligible subject matter because they “describe[d] a process of curing rubber beginning with the loading of the mold and ending with the opening of the press and the production of a synthetic rubber product that has been perfectly cured — a result heretofore unknown in the art.” *Diehr*, 450 U.S. at 193 n.15. It explained that claims are patent eligible under § 101 “when a claim containing a mathematical formula implements or applies that formula in a structure or process which, when considered as a whole, is performing a function which the patent laws were designed to protect.” *Id.* at 192. The Federal Circuit has held that *Diehr* is instructive precedent for Alice Step 1: “In terms of the modern day *Alice* test, the *Diehr* claims were *directed to* an improvement in the rubber curing process, not a mathematical formula.” *Thales*, 850 F. 3d at 1348 (emphasis added).

The '276 patent is comparable in this regard to *Diehr*, in which (as reprised in the later *Alice* decision), the inventor deployed a thermocouple into the mold, which “constantly determine[ed] the temperature (Z) of the mold at a location closely adjacent to the mold cavity in the press during molding.” It is also comparable to *Thales*, where the court upheld claims to an inertial sensor tracking system, in which equations “dictated by the placement of the inertial sensors ... reduce[] errors in the

inertial system,” finding the claims “nearly indistinguishable from those in *Diehr*.” *Id.*

Like the thermocouple and continuous measurements in *Diehr*, and the position tracking in *Thales*, the inventor here embedded a configuration adapter into the device to be networked, to provide a built-in component operable to receive on the device a download of the data for a network design, to be used later, during initialization, to cause the device to join the network automatically. Introducing the configuration adapter into the devices to be configured vastly simplifies the process of installing networked devices, changing the process from one requiring detailed individual operations on each device, some in place (*e.g.*, the top of a light pole) and under power, to a situation where the device can be “tapped” once with a tool, even through its packaging, and then just put physically into place. This represents a clear improvement in the physical process of deploying networked devices. As in *Diehr*, this is something that practitioners in the field of the ’276 patent had not been able to achieve. The fact that a computer created the design for the network, or that a “control” element (inside the device) will power the steps by which the device joins the network, does not change the fact that the improvement here concerns the process of configuration and deployment, which results from a hardware modification, and is not a function of the programming of any computer. As the Supreme Court concluded in *Diehr*, the fact that a computer is involved in an otherwise patentable

process—which corresponds to what is presented here in the introduction of the configuration adapter into the configuration process—does not preclude patent-eligibility.

Defendants nevertheless seek to argue based on merely automating a previously manual process, analogizing it to taking an age-old process and merely saying “do it with a computer.”

There is in fact no such age-old process. The process that generally prevailed, prior to the invention, as reflected in the four-step process recited in column 1 of the ’276 patent, was modified, by physically incorporating a configuration adapter into the device to be configured, which allowed the prior four labor-intensive configuration steps to be combined and changed, to simply tapping on the device with a tool and plugging the device into its installed position. The process steps after this invention are not merely an automated version of what went before, they are different steps, performed at different times and reflected in different physical operations. It thus provides a substantial operating advantage over the prior art.⁴

⁴ In addition, Defendants, through their Step 1 analysis, repeatedly talk about the ’276 patent allegedly employing only “generic” and “conventional” “computer” components. This is addressed under Step 2 below, but in itself actually has nothing to do with Step 1.

Since changing the physical process by introducing new physical components and altering the procedure of configuring tangible devices is otherwise a patent-eligible process and not an abstract idea under *Alice* Step 1, it does not matter whether a configuration adapter is conventional or not. Step 1 looks to the claim as a whole, and it is irrelevant to the Step 1 analysis whether individual claim steps are or are not implemented with conventional apparatus, if the process is significantly altered. Indeed, in *Diehr*, no one contended that the thermocouple cited in the opinion, and focused on when *Diehr* was later revisited in *Alice*, was not a “conventional” piece of equipment. But it made no difference, because, according to the decision in *Alice*, *Diehr* passed Step 1, because the character of its claim—how it improved over the prior art—concerned improving an otherwise statutory process by “constantly determining the temperature” at the relevant location. The fact that the thermocouple used to do this in *Diehr* may itself have been conventional did not change the result. Defendants extensively discuss “conventionality” in their *Alice* Step 1 analysis, which becomes an obviousness argument, rather than one directed at the proper tests under *Alice*.

Another reason why the claims at issue pass Step 1 is that they improve the functionality of the apparatus in question, and of the network. Introducing the configuration adapters enables the devices and corresponding tools to achieve a new order of procedural steps, which in turn vastly simplifies the network setup process.

It also makes it easier to set up complex networks, where, for example, devices can be commissioned in bulk by unskilled personnel and a master controller can be automatically set up to control a large number of devices through similarly set up access points. *See, e.g.,* '276 patent, 12:58-67. These significant changes in apparatus and process improve the devices, sensors, and controllers involved, to make them each more simple to deploy and use, and makes the network itself more useful. *See SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1168 (Fed. Cir. 2018) (improving the apparatus “as tools”).

2. Defendants Inadequately Address the Dependent Claims

Defendants do not argue anywhere in their motion for a “representative claim.” *Cf. Berkheimer*, 881 F.3d at 1365 (plaintiff who “advanced meaningful arguments regarding limitations found only in the dependent claims” preserved the right to argue the claims separately). Instead, Defendants insert a short section at the end of their brief that purports to address all of the dependent claims, yet conspicuously avoids addressing the actual wording of these claims, taking the expedient of disparaging those claims as a group, as “computer jargon.” The dependent claims are not “computer” anything. The additional claim features have nothing to do with the operation of a computer.

The dependent claims introduce significant additional features. *See Rowe* Dec. ¶¶ 78-89. Claims 4-5 and 7-14 further address the complexities of managing

heterogeneous networks of wired and wireless devices, introduce address translation tables to integrate them in one design that can be transferred in accordance with the invention. Claims 15-16 further address adapting the installation process by introducing steps to facilitate the automatic association of a device to be commissioned with its physical location in the network design. Claims 18-20 and 22-25 further concern scaling up the methodology to networks comprising multiple devices. These are qualitative differences that cannot be disregarded wholesale by merely labeling them as “jargon.”

B. Step 2 Analysis

Step 2 considers “the elements of each claim both individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Alice*, 573 U.S. at 217.

As discussed above, Step 2 is not reached at all unless it has already been found that the claim in question is “directed to” an abstract idea.

Defendants’ brief uses the word “generic” two dozen times. It focuses throughout (improperly as to Step 1), and further as to Step 2, on the argument that the claims are implemented by means of “a handful of generic computer components,” and that the specific hardware referenced in the claims, the “configuration adapter,” is no more than ‘an assembly of standard and conventional computer

components.” Computer components, computer components, computer components (actually, *six* repetitions).

The Defendants use a dozen pages of their brief to attempt to establish that “devices exactly *like* the configuration adapter of the ’276 Patent were *well-known and documented in the prior art*.” Opening Br. at 31 (emphasis added) (continuing to page 43).

The Defendants’ choice of words itself—particularly the word “like” and the specification of “the prior art” as the basis for the assertion—reflects that the Defendants simply do not have the evidentiary support even to argue that a configuration adapter as in the ’276 patent claims was a conventional item for the relevant artisan in 2007.

Defendants’ argument is insufficient insofar as it is directed to the prior art. The fact that an item was something was known in the prior art is not a sufficient basis to find that its use had become routine and conventional. “Whether a particular technology is well-understood, routine, and conventional goes beyond what was simply known in the prior art. The mere fact that something is disclosed in a piece of prior art, for example, does not mean it was well-understood, routine, and conventional.” *Berkheimer*, 881 F.3d at 1369; *see also Exergen Corp. v. Kaz USA, Inc.*, 725 Fed. Appx. 959, 965 (Fed. Cir. 2018) (“Something is not well-understood, routine, and conventional merely because it is disclosed in a prior art reference. There

are many obscure references that nonetheless qualify as prior art.”); *TMI Sols.*, 2018 WL 4660370 at *5; *CardioNet*, 955 F.3d at 1373-74.⁵

Furthermore, the word “like” in Defendants’ argument is a huge qualifier. If anything, the argument based on similarity (as characterized by the word “like”) is directed to obviousness—suggesting that it would have been obvious to have modified prior art devices to perform as the configuration adapter in the claims. But obviousness is not a proper consideration under § 101. *See* III.B.1.d) above.

Defendants also gloss over what constitutes a configuration adapter. They seek to define it, in its entirety, as “a component in a device or connected to a device which receives and stores configuration data.” They quote a passage that explains what the term is referring to (’276 patent, 9:48-50) but which does not identify these words as a “definition.” In fact, the Defendants’ formulation leaves out an entire piece of functionality. The patent does in fact specifically explain the components that make up a configuration adapter “according to the present invention.” ’276 patent, 14:47-48. This disclosure includes three (3) components: (1) a configuration

⁵ Defendants seek to argue “longstanding practice,” but that argument runs into the problem that the practice they would rely on has been *modified* as part of the patent claims. Having failed at that, they turn to citing pages of prior art. However, the mere existence of alleged prior art under 35 U.S.C. §§ 102 and 103 does not substitute for establishing routine, conventional, longstanding practice under § 101. *CardioNet*, 955 F.3d at 1373-74.

interface (*e.g.*, NFC); (2) a control/memory element; and (3) *a device contact interface* (*e.g.*, DALI or I²C bus).

The literal claims also recite the operation of “reading said downloaded data from the configuration adapters once the devices are initialized” (*id.*, 25:8-10, 27:31-33), presuming the existence of an interface within the device to access the configuration adapter’s memory when the devices are later powered up.

There should be no dispute, therefore, that the configuration adapter in the claims includes a wired interface, such as an I²C bus, to make use of the stored configuration data as recited in the claims.⁶

What the Defendants need to make their argument under Step 2 (assuming they could otherwise get past Step 1) is a conventional piece of apparatus that was embeddable in a device and could capture configuration settings for the device without applied power to the device, which would persist until the settings were later read from memory and applied during (powered) device initialization. It is that type

⁶ Defendants also try to make much of these terms being “functional.” To the extent deemed functional (and Plaintiff does not concede that any of them are), such claiming is permitted under 35 U.S.C. § 112(f), which provides in such a case that the meaning of the structural element for performing the function is determined by reference to the specification. In the case of the configuration interface, this would cover, *e.g.*, an NFC interface (’276 patent, 14:56-57), in the case of the device contact interface, this is identified as interfaces such as DALI, 1-Wire, and I²C. *Id.*, 14:67-15:2.

of component, and nothing less, that is necessary to bring the invention of the '276 patent to life.

Where can such a component be found?

A “configuration adapter” as described in the '276 patent was *not* a “conventional” item in the field of the '276 patent as of November 2007. Today, as shown in Exhibits E and F hereto to Prof. Rowe’s declaration, one can readily buy such items, referred to as dual-interface NFC EEPROM chips, from suppliers, such as NXP USA, Inc. (*e.g.*, its NTAG-I²C of chips) and STMicroelectronics, Inc. (*e.g.*, its M24LR family of chips) (though Prof. Rowe states that their use to configure automation devices has not become conventional, even today). Rowe Dec. ¶ 62. However, as already noted, these devices did not even appear on the market until approximately 2010. *See* Rowe Dec. at Ex. D. In 2007, such items were not generally available off-the-shelf. *Id.*

Defendant ST in fact *introduced* such a product in 2010 with fanfare as to how it would transform the process of deploying electronic instruments. The ST press release reflects in one of the Defendants’ own words that this was not a conventional component prior to its introduction. Plaintiff’s expert affirmatively so states. *See* Rowe Dec. ¶ 62 and Exs. E and F thereto. There is no evidence in the record to the contrary.

Defendants cite nothing they even claim was in conventional use prior to November 2007 that fits the foregoing requirements. Even if the Court were to accept Defendants' expert's conclusory and factually unsupported contentions that a configuration adapter as in the '276 patent was a routine and conventional piece of apparatus in November 2007, there is competent evidence to the contrary, constituting a dispute of material fact precluding any grant of summary judgement.

Defendants rely heavily on Smith, a patent application that was first published on February 21, 2008—*after* the claimed priority date of the '276 patent and obviously after its invention. This publication by no means establishes that the teachings of Smith had in any sense become conventional as of November 2007, nor could it. Smith came to the public too late to have any relevance to what was conventional earlier, as of November 2007. It would be error for the Court to rely on Smith in support of any finding of conventionality under Alice Step 2.

With Smith off the table, the practitioner is left with bits and pieces that the practitioner would have to piece together. The argument also could not be that it would have been *obvious* to have *created* a configuration adapter from electronic parts or adding electronic parts to inchoate assemblies. For Step 2, the argument *has to be* implementing the abstract idea per Step 1 using routine and conventional apparatus for their ordinary purposes. Nothing else that Defendants cite comes even close.

Defendants' submissions go on at length about the ISO 14443 standard and its associated Proximity Integrated Circuit Card (PICC). But ISO 14443 has no device contact interface. *See* Plaintiff's Statement of Disputed Facts ("Statement") at No. 64. There is no dispute that ISO 14443 defines a standard for communication over short ranges by inductive coupling. The '276 patent expressly refers to and *uses* this standard, as *part* of its implementation. ISO 14443 defines a standard that is used but does not by any stretch constitute the claimed invention. A PICC as described in ISO 14443 is a device such as a fare card for mass transit, that can contactlessly receive and store information such as fare usage and remaining fare balance. But as pointed out by Plaintiff's expert, a PICC lacks a device contact interface that is part of the configuration adapter in the '276 patent. *See* Statement at Nos. 53, 54, 64. A PICC is not a "configuration adapter," and this fact is undisputed.

Defendants' Brief at 11 cites a 2004 Philips paper for exchanging data via NFC, which only involves reading parameters, with nothing about writable and persistent memory, far short of a configuration adapter as in the '276 patent claims. Statement at Nos. 46, 47, 63; Ex. 3 to Abramson Dec., Declaration of Anthony G. Rowe, dated January 28, 2021 ¶ 4.

Teraura, U.S. Patent No. 6,873,259 proposed an RFID tag for use as an electronic ID device. Thought it did disclose embodiments in which a running computer

could read data on the tag through an electronic interface, there is no suggestion to use the tag for any configuration setup of a device. Rowe Dec. ¶ 73.

Dua, U.S. Pat. No. 8,244,179, like ISO 14443, discloses stored device profiles which may be used to set up pairings with other devices. However, these develop on the device during operation, and are used during operation to pair with other devices. There is no disclosure of using this technique to form network connections automatically on device initialization. Dua discloses that the RFID tag may be passive, but in that case “there is no option to update the tag information, so the information only the Bluetooth serial number of the headphone unit 152.” Rowe Dec. ¶ 71.

Spencer, U.S. Pat. No. 6,712,277, is directed to a memory card for use with devices such as “cameras and PDAs.” It says nothing about adapting any of its circuitry as a component to be built into another device as a repository for initialization information to set up network connections. Rowe Dec. ¶ 72.

Defendants’ discussion of these items of prior looks exactly like an obviousness argument under 35 U.S.C. § 103, because that is what it is. It is not a proper argument under § 101.

Defendants’ evidence, even if taken without regard to the fact that it is factually disputed, falls far short of demonstrating conventionality. Defendants, citing *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350, 1356 (Fed. Cir. 2016), argue that “there is a critical difference between patenting a particular concrete

solution to a problem and attempting to patent the abstract idea of a solution to the problem in general.” Opening Br. at 16-17. This might make sense if the claim purported to cover *any* manner of setting up a network, as opposed to (as here) specifying specialized hardware component to be included in each setup and a corresponding procedure that delays device initialization. Unlike *In re TLI Communications LLC Patent Litigation*, 823 F.3d 607, 611 (Fed. Cir. 2016), the ’276 patent does not involve merely automating a sequence of prior steps from a pre-existing manual process using general purpose tools that simply work as expected to perform their usual function. In particular, there is no analog in the prior device commissioning procedure that corresponds to the step of transferring a complete set of all needed design data to the device before it is initialized, and the hardware for doing this, *i.e.*, the commissioning tool and configuration adapters with complementary NFC interfaces, which were not generally available at all. Defendants quote *Affinity Labs of Tex., LLC v. DirecTV, LLC*, 838 F.3d 1253, 1264 (Fed. Cir. 2016), arguing that the present case similarly reflects “nothing more than a “particular choice[] [of technology] from within a range of existing [technologies].” Opening Br. at 17-18. The “particular choice” rationale in *Affinity Labs* was referring to the fact that the choices, such as selecting the type of content to send, or the type of information to display user, did not have technological significance to whether the claimed operation would work or not. Here the choice is limited to functionality uniquely suited to making

possible the revised procedure of configuring first without power and then initializing, *i.e.*, the ability to write the design data to the device without applied power, to persist that data in the device until needed for later initialization under power. This was a purpose-built set of components (the commissioning tool and the configuration adapter in the device), not a technologically arbitrary selection from a range of workable solutions or mere content to carry. Defendants' authorities fail to address the facts before the Court concerning how the hardware and process improvements implemented in the '276 patent improve the functioning of the automation platform itself, a key to patentable subject matter.

V. CONCLUSION

WHEREFORE, for the foregoing reasons, Defendants' motion should be denied.

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CERTIFICATE OF COMPLIANCE

The foregoing Plaintiff's Memorandum in Opposition to Motion for Summary Judgment complies with the type-volume limitations of the Court's November 6, 2019 Standing Order Regarding Briefing in All Cases and this Court's Scheduling Order (D.I. 41, 60). The text of the Brief, including footnotes, was prepared in 14-point Cambria font and contains 9,804 words.

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